	Application No.	Applicant(s)
Notice of Allowability	10/056,653	FRANZ ET AL.
	Examiner	Art Unit
	Jacob F. Betit	2164
The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI	(OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to	plication. If not included will be mailed in due course. THIS
1. This communication is responsive to the after final amendment dated 05-July-2005.		
2. $\boxtimes$ The allowed claim(s) is/are <u>2-11 and 13-20</u> .		
3. The drawings filed on <u>25 January 2002</u> are accepted by the Examiner.		
4. ☐ Acknowledgment is made of a claim for foreign priority una) ☐ All b) ☐ Some* c) ☐ None of the:  1. ☐ Certified copies of the priority documents have 2. ☐ Certified copies of the priority documents have 3. ☐ Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:	be been received. be been received in Application No.	
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements
5. A SUBSTITUTE OATH OR DECLARATION must be subminformal PATENT APPLICATION (PTO-152) which give		
6. CORRECTED DRAWINGS ( as "replacement sheets") mus  (a) including changes required by the Notice of Draftspers  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examiner's Paper No./Mail Date  Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in to 7. DEPOSIT OF and/or INFORMATION about the depo	son's Patent Drawing Review(PTO- s Amendment / Comment or in the C .84(c)) should be written on the drawir he header according to 37 CFR 1.121(c	Office action of action of the back) of d).
attached Examiner's comment regarding REQUIREMENT		
Attachment(s)  1. Notice of References Cited (PTO-892)	5 T Notice of Informal P	atent Application (PTO-152)
Notice of Preferences Great (170-032)     Notice of Draftperson's Patent Drawing Review (PTO-948)	6. X Interview Summary	(PTO-413),
3. Information Disclosure Statements (PTO-1449 or PTO/SB/0	Paper No./Mail Dat 08), 7. ⊠ Examiner's Amendn	
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit		ent of Reasons for Allowance
of Biological Material	9.  Other	•
		C. Rones
		CHARLES RONES RIMARY EXAMINER

## **DETAILED ACTION** .

## Remarks

- 1. In response to communications filed on 05-July-2005, claims 2-4, and 14-16 are amended and claims 1, 13, and 23-33 are canceled per applicant's request. Claims 2-11 and 13-20 are presently pending in the application.
- 2. In view of the examiner's amendment, authorized by Attorney of Record, claims 4 and 16 are amended by the examiner (details provided below).

## Examiners Amendment

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Frank DaRosa on 20-July-2005 (see attached interview summary).

The application has been amended as follows:

Replace claim 4 with the following:

4. (Currently Amended) A <u>computer implemented</u> method for compressing an index file in an information retrieval system that retrieves information from a plurality of

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documents, each of the plurality of documents having features occurring therein, the method comprising the step of:

representing occurrence frequencies of the features in the plurality of documents in a compressed format in the index file, wherein the compressed format comprises a plurality of bin identifiers for a plurality of bins over which the occurrence frequencies are categorized, wherein said representing step comprises the steps of:

mapping the occurrence frequencies into a plurality of bins; and storing the bin identifiers in the index file, each of the bin identifiers identifying at least one of the bins to which at least one individual occurrence frequency is mapped.

Replace claim 16 with the following:

16. (Currently Amended) An apparatus for compressing an index file in an information retrieval system that retrieves information from a plurality of documents, each of the plurality of documents having features occurring therein, the apparatus comprising:

a compression device for representing that represents occurrence frequencies of the features in the plurality of documents in a compressed format in the index file, wherein the compressed format comprises a plurality of bin identifiers for a plurality of bins over which the occurrence frequencies are categorized, wherein said compression device comprises:

a bin generator for generating that generates the plurality of bins and the corresponding plurality of bin identifiers, each of the plurality of bin identifiers

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respectively identifying one of the plurality of bins to which at least one individual occurrence frequency is mapped;

a mapping device for mapping that maps the occurrence frequencies into the plurality of bins, and

a storage device for storing that stores the bin identifiers in the index file.

## Allowable Subject Matter

4. Claims 2-11 and 13-20 are allowed.

The following is an examiner's statement of reasons for allowance:

The prior art of record does not disclose, teach or suggest (in combination with all other features of the claim):

mapping the occurrence frequencies into the plurality of bins; and

storing the bin identifiers in the index file, each of the bin identifiers identifying at least one of the bins to which at least one individual occurrence frequency is mapped, as claimed in independent claim 4.

Claims 2-3 and 5-12 are allowed for being dependent on allowed independent claim 4.

The prior art of record does not disclose, teach, or suggest (in combination with all other features of the claim):

a bin generator that generates the plurality of bins and the corresponding plurality of bin identifiers, each of the plurality of bin identifiers respectively identifying one of the plurality of bins to which at least one individual occurrence frequency is mapped;

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a mapping device that maps the occurrence frequencies into the plurality of bins;

and

a storage device that stores the bin identifiers in the index file as claimed in

independent claim 16.

Claims 14-15 and 17-22 are allowed for being dependent on allowed independent

claim 16.

Any comments considered necessary by applicant must be submitted no later than

the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on

Statement of Reasons for Allowance."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jacob F. Betit whose telephone number is (571) 272-

4075. The examiner can normally be reached on Monday through Friday 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Charles Rones can be reached on (571) 272-4085. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

ifb

15 Jul 2005

CHARLES RONES
PRIMARY EXAMINED